framed middle portion **722**, in one embodiment, may be threaded holes. Pins that have notches on them that correspond to these holes may be used to secure a shoe portion into place. The pins are inserted into these holes. In some embodiments, only a portion of the holes are used at one time. The number of pins and corresponding holes that are used may depend on the type of component or the type of machine that is performing a specific process on the shoe component. Having as many holes as shown in FIG. **7** allows for maximum flexibility of the alignment frame **720** such that it can be used with a variety of machines and processes. The larger and more sparse holes shown in FIG. **7** allow for each plate or component shown here, in addition to others that may not be shown, to be secured to one another. Additionally, the small and large slots on the alignment frame **720**, shown generally as reference number **724**, may allow the alignment gauge, or more specifically the alignment frame **720** to be secured to various pieces of manufacturing equipment, including, without limitation, a printer, a heat press, an embroidery machine, a forming machine, a trimming machine, etc.

FIG. **8** illustrates an alignment fixture **800** used to perform final trimming on a vamp portion of a shoe, in accordance with an embodiment of the present invention. Base plate **810** includes a raised portion **814** and two pins **812**. The pins **812** are used to secure the base plate **810** to the alignment frame **816**, as the pins **812** correspond to openings or holes in the alignment frame **816**. Further, the raised portion **814** includes various ridges, shown generally as reference number **815**. These various shaped ridges **815** may have blades within them that protrude upward from the raised portion **814** such that when the alignment frame **816** is secured to the base plate **810**, the blades in the ridges **815** cut through the shoe portion and thus trim the shoe portion to the correct shape. Other holes shown on the raised portion **814** allow for other plates, not shown here, to be secured to the base plate **810**.

Referring to FIG. **9**, an alignment fixture **900** used to form a vamp portion of a shoe is illustrated, in accordance with an embodiment of the present invention. This forming system includes a base plate **910** and an alignment plate **912**. The base plate **910** may be formed of, in one embodiment, aluminum teflon coated dies or plates, whose shape may be dictated by the type of the shoe portion being used in conjunction with the forming system shown in FIG. **9**. Here, the shoe portion may be a vamp. The alignment frame **912** is similar, or even the same as that shown in FIGS. **7-8**. For example, the alignment frame **912** includes a cut out or framed middle portion that is substantially the same shape as the shoe portion, and the same shape as the shape of the bottom plate **910**. Further, the alignment frame **912** includes a plurality of small holes and various larger holes used to secure the alignment frame **912** to various tools and machines. In one embodiment, a top plate, not shown here, may be used to sandwich the alignment frame **912** such that the alignment frame **912**, and thus the shoe portion are located and pressed in between the base plate **910** and the top plate.

FIG. **10** illustrates an alignment fixture **1000** used to form a tongue portion of a shoe, in accordance with an embodiment of the present invention. FIG. **10** includes a base plate **1010** and an alignment frame **1012**. These components function in the same way as those described herein in relation to FIG. **9**. Here, the difference is that the shoe portion is a tongue of a shoe instead of a vamp. The alignment frame **1012** has a plurality of small and larger holes used to secure the shoe portion to the alignment frame **1012**, and to secure the alignment frame **1012** to other components not shown here.

FIG. **11** illustrates a tongue trimming system **1100**, in accordance with an embodiment of the present invention. The tongue trimming system **1100** includes a trimming plate **1110** having various ridges that allow for blades to be inserted that cut through the shoe portion being trimmed. The two holes **1114** on the trimming plate **1110** allow for another plate, not shown, to be mounted to the trimming plate **1110**.

FIG. **12** illustrates a tongue trimming system **1200** for a left and a right shoe, in accordance with an embodiment of the present invention. The tongue trimming system **1200** includes the trimming plate **1110** described in FIG. **11**. Here, there are two stations for performing trimming. One may be for a left shoe or a portion of a left shoe, and the other may be for a portion of a right shoe. Here, the portion is a tongue. Base plate **1210** is secured to the two trimming plates **1214** and **1216** by, in one embodiment, the two large holes in each trimming plate which allow for a pin, for example, to protrude through the holes, thus securing the trimming plates **1214** and **1216** in place. The base plate **1210** also has a plurality of pins **1212** that may be used to secure a top plate, not shown, to the rest of the alignment fixture. The top plate may be used for other processes other than trimming.

FIG. **13** illustrates a series of processes used in conjunction with an alignment fixture, the processes shown generally as reference number **1300**. These processes include cold pressing, forming, and trimming of a vamp portion of a shoe, in accordance with an embodiment of the present invention. Each of processes **1310**, **1312**, and **1314** have been described herein, but are shown here in FIG. **13** as a series of processes. It should be noted that the same alignment frame is used in each of the processes, and is easily placed and removed from each process.

While the present invention has been described in relation to the customization and manufacturing of a shoe, it will be appreciated that the present invention may also be used in conjunction with other products that may be produced from fabric or other materials and that may be customized in certain aspects. For example, various aspects of the present invention may be used in the customization and manufacture of handbags, sports equipment (e.g., soccer balls, sports bags), or any type of clothing, including hats.

The present invention has been described in relation to particular embodiments, which are intended in all respects to be illustrative rather than restrictive. Alternative embodiments will become apparent to those of ordinary skill in the art to which the present invention pertains without departing from its scope. For example, the inventions described herein may be readily applied to manufacturing any type of footwear including dress shoes, sandals, all types of boots, or any other type of footwear. Furthermore, aspects hereof may be readily adapted to any traditional manufacturing process where reducing variation due to operator interaction is desired.

From the foregoing, it will be seen that this invention is one well adapted to attain all the ends and objects set forth above, together with other advantages which are obvious and inherent to the system and method. It will be understood that certain features and sub-combinations are of utility and may be employed without reference to other features and sub-combinations. This is contemplated by and is within the scope of the claims.

What is claimed is:

1. A system for manufacturing shoes, the system comprising: at least two pieces of dedicated manufacturing equipment, each of the pieces of manufacturing equipment including an alignment mounting member; and an alignment fixture including a corresponding alignment mating member that engages with the alignment mounting member such that when the alignment fixture is moved from one piece of manufacturing equipment to another, a portion of a shoe may be